(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
29 December 2011 (29.12.2011)

PCT

(10) International Publication Number
WO 2011/163412 A1

(51) International Patent Classification:
A61K 39/395 (2006.01) *C07K 16/28* (2006.01)

(21) International Application Number:
PCT/US2011/041517

(22) International Filing Date:
22 June 2011 (22.06.2011)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/357,499 22 June 2010 (22.06.2010) US

(71) Applicant *(for all designated States except US)*: **THE REGENTS OF THE UNIVERSITY OF COLORADO, A BODY CORPORATE** [US/US]; 1800 Grant Street, 8th Floor, Denver, CO 80203 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **HOLERS, V., Michael** [US/US]; 242 South Hudson Street, Denver, CO 80246 (US). **THURMAN, Joshua, M.** [US/US]; 2 Red Fox Lane, Greenwood Village, CO 80111 (US). **KULIK, Liudmila** [BY/US]; 14934 East Hampden Circle, D5, Denver, CO 80014 (US).

(74) Agents: **SHOW, Matthew, D.** et al.; Morrison & Foerster LLP, 755 Page Mill Road, Palo Alto, CA 94304-1018 (US).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

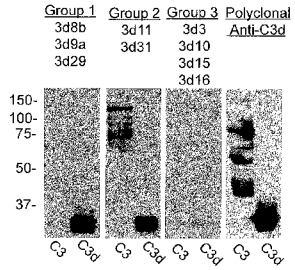
Published:

— *with international search report (Art. 21(3))*

(54) **Title**: ANTIBODIES TO THE C3D FRAGMENT OF COMPLEMENT COMPONENT 3

Figure 3

A Subset of mAbs (Group 1) Preferentially Bind C3d by Western Blot Analysis



(57) **Abstract**: The present invention relates to methods and materials for modulating the complement alternative pathway (CAP), the complement classical pathway (CCP), the complement lectin/mannose pathway (CMP), or combinations thereof, as well as methods and materials for targeting diagnostic, prophylactic and therapeutic agents to localized areas of tissue within the body where they may more directly exert their effects upon the intended target cells or tissue, with reduced, associated systemic effects compared with administration of the same or similar agents in an untargeted, systemic manner. The methods and materials of the present invention may therefore allow for increased efficacy, lower threshold effective dosages and/or lower effective maintenance doses, and/or reduced associated undesired or adverse effects in terms of frequency or severity of occurrence, or both. The present invention also relates to methods and materials for modulating a host humoral immune response, especially reducing, inhibiting, or preventing a host humoral immune response.

WO 2011/163412 A1